

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) An adhesive film for bonding circuit members, said adhesive film adapted to be put between circuit electrodes facing each other, with said circuit electrodes facing each other being pressed interposing the adhesive film between them, to interconnect the electrodes electrically in the direction of pressing,

wherein said adhesive film comprises:

a first adhesive layer which includes an adhesive resin composition and an insulative inorganic filler;

said insulative inorganic filler being contained in an amount of from 10 to 200 parts by weight based on 100 parts by weight of the adhesive resin composition;

said adhesive film having an average coefficient of thermal expansion of 200 ppm/°C or below at 110 to 130°C after curing; and

the adhesive film further comprising conductive particles in an amount of from 0.1 to 30 parts by volume based on 100 parts by volume of the adhesive resin composition.

2. (Previously presented) An adhesive film for bonding circuit members according to claim 1, said adhesive film further comprising a second adhesive layer containing an adhesive resin composition as a main ingredient.

3. (Previously presented) An adhesive film for bonding circuit members according to claim 1, said adhesive film further comprising a second adhesive layer containing an adhesive resin composition as a main ingredient and having a modulus of elasticity of from 100 to 2,000 MPa at 40°C after curing.

4. (Cancelled).

5. (Currently amended) The adhesive film for bonding circuit members according to claim 1[[4]], which has an average coefficient of thermal expansion of from 30 to 200 ppm/°C at 110 to 130°C after curing of the adhesive film.

6. (Currently amended) An adhesive film for bonding circuit members, said adhesive film adapted to be put between circuit electrodes facing each other; said circuit electrodes facing each other being pressed interposing the adhesive between them, to interconnect the electrodes electrically in the direction of pressing,

wherein said adhesive film comprises:

a multi-layer constitution having a third adhesive layer and a fourth adhesive layer which have physical properties different in value from each other, and

wherein said third adhesive layer has a coefficient of thermal expansion at 30° to 100°C, of from 20 to 70 ppm/°C, and

wherein at least one layer of said third and fourth adhesive layers contains an adhesive resin composition and an insulative inorganic filler in an amount of from 10 to 200 parts by weight based on 100 parts by weight of the adhesive resin composition.

7. (Previously presented) The adhesive film for bonding circuit members according to claim 6, wherein said third adhesive layer has a modulus of elasticity after curing which is higher than the modulus of elasticity after curing of said fourth adhesive layer.

8. (Previously presented) The adhesive film for bonding circuit members according to claim 7, wherein said fourth adhesive layer has a modulus of elasticity of from 100 to 2,000 MPa at 40°C after curing.

9. (Previously presented) The adhesive film for bonding circuit members according to claim 6, wherein said third adhesive layer has a coefficient of thermal expansion which is smaller than the coefficient of thermal expansion of the fourth adhesive layer.

10. (Cancelled).

11. (Previously presented) The adhesive film for bonding circuit members according to claim 6, wherein said third adhesive layer has a glass transition temperature which is higher than the glass transition temperature of the fourth adhesive layer.

12. (Previously presented) The adhesive film for bonding circuit members according to claim 11, wherein said third adhesive layer has a glass transition temperature of 120°C or above.

13. (Cancelled).

14. (Previously presented) The adhesive film for bonding circuit members according to claim 1, wherein said insulative inorganic filler has an average particle diameter of 3 μm or smaller.

15. (Cancelled).

16. (Previously presented) The adhesive film for bonding circuit members according to claim 1, wherein the conductive particles have a larger average particle diameter than the average particle diameter of said insulative inorganic filler.

17. (Previously presented) The adhesive film for bonding circuit members according to claim 1, which has a modulus of elasticity of from 30 to 2,000 MPa at 40°C after the curing of the adhesive resin composition.

18. (Previously presented) The adhesive film for bonding circuit members according to claim 1, wherein said adhesive resin composition contains an epoxy resin and a latent curing agent.

19. (Previously presented) The adhesive film for bonding circuit members according to claim 1, wherein said adhesive resin composition contains an epoxy resin, an acrylic rubber and a latent curing agent.

20. (Previously presented) The adhesive film for bonding circuit members according to claim 19, wherein said acrylic rubber contains a glycidyl ether group in the molecule.

21. (Cancelled).

22. (Withdrawn) A circuit board comprising:
a first circuit member having a first connecting terminal; and
a second circuit member having a second connecting terminal;
said first connecting terminal and the second connecting terminal being disposed facing each other, and an adhesive being put between the first connecting terminal and the second connecting terminal which are disposed facing each other;
and
said first connecting terminal and the second connecting terminal disposed facing each other being electrically interconnected by pressing;
said adhesive being the adhesive for bonding circuit members according to claim 1.

23. - 25. (Cancelled).

26. (Withdrawn) A process for producing a circuit board, comprising the steps of:
disposing a first circuit member comprised of an inorganic insulating substrate, having a first connecting terminal, and a second circuit member comprised of an organic insulating substrate, having a second connecting terminal, in such a

way that the first connecting terminal and the second connecting terminal face each other;

said circuit members being so disposed that the adhesive for bonding circuit members according to claim 2 is put between said first connecting terminal and said second connecting terminal which have been disposed facing each other, in such a way that said first adhesive layer is on the side of said first circuit member; and

pressing the resultant circuit members to electrically interconnect said first connecting terminal and said second connecting terminal disposed facing each other.

27. (Withdrawn) A process for producing a circuit board comprising the steps of;

disposing a first circuit member comprised of an inorganic insulating substrate, having a first connecting terminal, and a second circuit member comprised of an organic insulating substrate, having a second connecting terminal, in such a way that the first connecting terminal and the second connecting terminal face each other;

said circuit members being so disposed that the adhesive for bonding circuit members according to claim 7 is put between said first connecting terminal and said second connecting terminal which have been disposed facing each other, in such a way that said third adhesive layer is on the side of said first circuit member; and

pressing the resultant circuit members to electrically interconnect said first connecting terminal and said second connecting terminal disposed facing each other.

28. (Withdrawn) A circuit board comprising:

a first circuit member, which is an inorganic insulating substrate, having a first connecting terminal; and

a second circuit member, which is an organic insulating substrate, having a second connecting terminal;

said first connecting terminal and the second connecting terminal being disposed facing each other, and an adhesive being put between the first connecting terminal and the second connecting terminal which are disposed facing each other; and

said first connecting terminal and the second connecting terminal disposed facing each other being electrically interconnected by pressing;

said adhesive being the adhesive for bonding circuit members according to claim 2; and

at least any of the first adhesive layer stands adhered on the side of said first circuit member.

29. (Withdrawn) The circuit board according to claim 28, wherein the first circuit member is a semiconductor chip.

30. (Withdrawn) A circuit board comprising:

a first circuit member, which is an inorganic circuit member, having a first connecting terminal; and

a second circuit member, which is an organic circuit member, having a second connecting terminal;

said first connecting terminal and the second connecting terminal being disposed facing each other, and an adhesive being put between the first connecting terminal and the second connecting terminal which are disposed facing each other; and

said first connecting terminal and the second connecting terminal disposed facing each other being electrically connected by pressing;

said adhesive being the adhesive for bonding circuit members according to claim 7; and

at least any of said third adhesive layer standing adhered on the side of said first circuit member.

31. (Withdrawn) The circuit board according to claim 30, wherein said first circuit member is a semiconductor chip.

32. (Previously presented) An adhesive film for bonding circuit members according to claim 1, consisting of said first adhesive layer.

33. (Withdrawn) An adhesive film for bonding circuit members, said adhesive film adapted to be put between circuit electrodes facing each other, said

circuit electrodes facing each other being pressed interposing the adhesive film between them, to interconnect the electrodes electrically in the direction of pressing,

wherein said adhesive film comprises:

a first adhesive layer which includes an adhesive resin composition and an insulative inorganic filler;

said insulative inorganic filler being contained in an amount of from 10 to 200 parts by weight based on 100 parts by weight of the adhesive resin composition; and

said adhesive film further comprising conductive particles.

34. (Withdrawn) An adhesive film for bonding circuit members according to claim 33, wherein said conductive particles have a larger average particle diameter than the average particle diameter of said insulative inorganic filler.